

## **500 STRUCTURES**

### **Item 501 Structures – General**

#### **501.04 Shop Drawings.**

**A. Contractor Acceptance of Shop Drawings for Items 513 and 515.** Delete the first paragraph and substitute:

After preparing the shop drawings for Items 513 and 515, submit five copies of the shop drawings to the City at least 30 days before the start of fabrication. The City and/or its designated agent will review the shop drawings in accordance with 105.02. Do not begin fabrication until the shop drawings have been accepted by the City. Leave a 3-1/2 inch by 3-1/2 inch blank space next to the title block for the review stamp.

Delete the last paragraph and substitute:

Schedule the pre-fabrication meeting after the shop drawings have been accepted by the City. Fabrication may begin after the pre-fabrication meeting is complete.

**B. Fabricator Coordination of Shop Drawings for Items 516, 517 and 518.** Delete the second paragraph and substitute:

Submit five copies of the shop drawings to the City at least 30 days before the start of fabrication. The City and/or its designated agent will review the shop drawings in accordance with 105.02. Do not begin fabrication until the shop drawings have been accepted by the City.

**C. Shop Drawing General Requirements.** Delete the second and third paragraphs and substitute:

Prepare the drawings using computer aided drafting software. Print drawings to scale on 22 x 34 inch (559 x 864 mm) sheets.

After all fabrication is completed for Items 513, 515, 516, 517 and 518, furnish one set of all shop drawings as corrected on mylar sheets and one copy of all drawings in PDF format on CD to the Engineer. Name PDF files using the drawing title unless the Engineer directs otherwise. Mark drawings and scanned files to indicate they are part of the Record Set.

### **Item 509 Reinforcing Steel**

**509.11 Basis of Payment.** Delete the second paragraph and substitute:

The Department will pay for accepted quantities at the Contract price as follows, unless the Special Provisions, the Detailed Provisions and/or the General Notes stipulate that payment for reinforcing steel will be included in the Contract prices for Item 510, 511, 519, 520, or the item specified:

## **Item 511 Concrete for Structures**

**511.06 Concrete Test Specimens.** Delete paragraphs A and B and substitute:

**A. Structures over 20-foot (6.1 m) span.** No fewer than four test cylinders from each 200 cubic yards (150 cubic meters) of concrete, or fraction thereof, that are incorporated into the work each day.

**B. Structures of 20-foot (6.1 m) span or less.** No fewer than four test cylinders from each 50 cubic yards (35 cubic meters) of concrete, or fraction thereof, that are incorporated into the work each day.

**511.17 Curing and Loading.** Delete the curing method table following the third paragraph and substitute:

<b>Location</b>	<b>Curing Method*</b>
Superstructure Concrete	Method B followed by Method A
Concrete to which sealer is to be applied	Method A
Construction joints	Method A
Top surface of Class HP concrete deck superstructure concrete	Method B followed by Method A
Concrete with waterproofing	Method A or Method B
All other concrete	Method A or Method B

\* Method A is water curing. Method B is membrane curing. If using Method B on areas to be waterproofed, remove the curing membrane after the cure period has elapsed.

## **Item 512 Treating Concrete**

**512.03 Sealing of Concrete Surfaces.** Delete paragraph G.1.e. and substitute:

Unless otherwise noted in the Plans, tint so the final color is as selected by the Engineer from all available colors and/or hues. Limit pigment content so as not to reduce sealing effectiveness of the second coat.

## **Item 519 Patching Concrete Structures**

**519.06 Placing, Finishing, and Curing of Concrete.** Add:

Notify the Engineer at least 24 hours in advance of sounding any patched area.

## **Item 520 Pneumatically Placed Mortar**

### **520.11 Inspection and Testing.** Add:

Notify the Engineer at least 24 hours in advance of sounding any patched area.

## **Item 524 Drilled Shafts**

### **524.10 Concrete for Drilled Shafts.** At the end of the first paragraph, add:

Class C concrete according to Item 511 may be used as modified and supplemented above, except do not exceed the maximum water-cement ratio of 0.50.

### **524.14 Construction Tolerances.** Delete first paragraph and substitute:

Locate the center of the shaft within one inch (25 mm) of the designated location. Drill shaft so that it is plumb within 1/8 inch per foot (10 mm per meter) of length. Correct any shaft varying by more than the above tolerances to the satisfaction of the Engineer.

If the depth to bedrock exceeds the limits shown on the plans by more than one foot (305 mm), cease drilling operations and contact the Design Engineer. The Design Engineer will assess the conditions and, if required, inform the Contractor of the additional shaft depth and the additional steel reinforcement requirements.

### **524.17 Basis of Payment.** Substitute:

"required excavation, including any excavation and benching for the drilling operations;" for "required excavation;"

At the end of the first paragraph, add: Include all costs of mobilizing and removing equipment in the unit Contract prices. Repair damage to the existing roadway from drilling, excavation or benching at no cost to the City.